



**STATE OF TENNESSEE  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL  
Lab Services - Jackson Regional Lab  
Jackson, TN 38301  
731-426-0686

TDH: Lab Services KRL  
Lab Services - Knoxville Regional Lab  
Knoxville, TN 37920  
865-549-5201

TDH: Lab Services NCL  
Lab Services - Nashville Central Lab  
Nashville, TN 37243  
615-262-6300

**Sent To:** Greg Denton  
TDEC-WPC  
6th Floor, L & C Tower Annex  
401 Church Street  
Nashville, TN 37243-1534

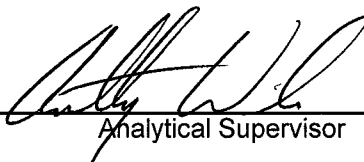
Michael Atchley  
TDEC-WPC  
Knoxville FO  
3711 Middlebrook Pike  
Knoxville, TN 37921

**Lab ID:** K00002891  
Knoxville Regional Laboratory

**Sampling Agency:** TDEC: Division of Water Pollution Control

**Billing Code:** 327.34-20

This is to certify that the following results were determined using  
good laboratory practices and in accordance with federal or state  
approved methodologies.

  
Analytical Supervisor

**Lab-Sample Number:** K00002891001  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River Mile 12.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 1  
**Station No.:** EMORY012.1RO  
**Date/Time Collected:** 09/22/2009 13:13  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.42 pH Units  
**Chlorine, residual:**  
**Conductivity:** 62 uMHO  
**Temperature:** 21.31  
**Dissolved Oxygen:** 9.06 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	480	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	200	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	28	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	0.44J	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	1.8	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	0.44J	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	52	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	1.6	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.078J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	4.3J	µg/L	1.9	5	M Pattanayek	9/24/2009

**Lab-Sample Number:** K00002891001  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River Mile 12.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 1  
**Station No.:** EMORY012.1RO  
**Date/Time Collected:** 09/22/2009 13:13  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.42 pH Units  
**Chlorine, residual:**  
**Conductivity:** 62 uMHO  
**Temperature:** 21.31  
**Dissolved Oxygen:** 9.06 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MQL

MDL - Method Detection Limit

MQL - Method Quantitation Limit

U - Undetected

**Lab-Sample Number:** K00002891002  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO  
**Date/Time Collected:** 09/22/2009 11:00  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.05 pH Units  
**Chlorine, residual:**  
**Conductivity:** 69 uMHO  
**Temperature:** 20.77  
**Dissolved Oxygen:** 8.06 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	960	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	380	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	0.57J	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	33	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	2.2J	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	0.58J	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	1.3	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	0.84J	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	73	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	2.1	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.16J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	3.2J	µg/L	1.9	5	M Pattanayek	9/24/2009

**Lab-Sample Number:** K00002891002  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO  
**Date/Time Collected:** 09/22/2009 11:00  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.05 pH Units  
**Chlorine, residual:**  
**Conductivity:** 69 uMHO  
**Temperature:** 20.77  
**Dissolved Oxygen:** 8.06 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00002891003  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Approx. 100' d/s from middle dredge point  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2A  
**Station No.:** Dredge Plume  
**Date/Time Collected:** 09/22/2009 11:15  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.05 pH Units  
**Chlorine, residual:**  
**Conductivity:** 88 uMHO  
**Temperature:** 21.14  
**Dissolved Oxygen:** 7.54 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	1000	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	730	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	0.67J	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	6.4	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	63	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	0.21J	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	3.8J	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	0.89J	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	4.4	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	1.5	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	73	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	2.5	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.25J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	5.6	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	8.8	µg/L	1.9	5	M Pattanayek	9/24/2009

**Lab-Sample Number:** K00002891003  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Approx. 100' d/s from middle dredge point  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2A  
**Station No.:** Dredge Plume  
**Date/Time Collected:** 09/22/2009 11:15  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.05 pH Units  
**Chlorine, residual:**  
**Conductivity:** 88 uMHO  
**Temperature:** 21.14  
**Dissolved Oxygen:** 7.54 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	0.07J	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00002891004  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.9 at underwater weir  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2B  
**Station No.:** EMORY001.9RO  
**Date/Time Collected:** 09/22/2009 11:24  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 6.98 pH Units  
**Chlorine, residual:**  
**Conductivity:** 74 uMHO  
**Temperature:** 20.92  
**Dissolved Oxygen:** 7.84 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals			METHOD: EPA 200.2			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP			METHOD: EPA 200.7			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	960	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS			METHOD: EPA 200.8			
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	540	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	0.38J	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	3.4J	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	47	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	0.15J	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	2.1J	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	0.74J	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	3.9	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	1.2	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	69	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	2.3	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.20J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	13	µg/L	1.9	5	M Pattanayek	9/24/2009



**Lab-Sample Number:** K00002891004  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.9 at underwater weir  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2B  
**Station No.:** EMORY001.9RO  
**Date/Time Collected:** 09/22/2009 11:24  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 6.98 pH Units  
**Chlorine, residual:**  
**Conductivity:** 74 uMHO  
**Temperature:** 20.92  
**Dissolved Oxygen:** 7.84 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MLQ	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MLQ  
 MDL - Method Detection Limit  
 MLQ - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00002891005  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.7  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 3  
**Station No.:** EMORY001.7RO  
**Date/Time Collected:** 09/22/2009 11:38  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 6.95 pH Units  
**Chlorine, residual:**  
**Conductivity:** 78 uMHO  
**Temperature:** 21.03  
**Dissolved Oxygen:** 7.69 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	1000	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	660	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	42	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	0.11J	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	0.85J	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	3.2	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	1.3	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	79	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	2.6	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.17J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	5.9	µg/L	1.9	5	M Pattanayek	9/24/2009

**Lab-Sample Number:** K00002891005  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.7  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 3  
**Station No.:** EMORY001.7RO  
**Date/Time Collected:** 09/22/2009 11:38  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

# Field Determinations

**pH:** 6.95 pH Units  
**Chlorine, residual:**  
**Conductivity:** 78 uMHO  
**Temperature:** 21.03  
**Dissolved Oxygen:** 7.69 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00002891006  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 0.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 4  
**Station No.:** EMORY000.1RO  
**Date/Time Collected:** 09/22/2009 11:51  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.04 pH Units  
**Chlorine, residual:**  
**Conductivity:** 99 uMHO  
**Temperature:** 22.02  
**Dissolved Oxygen:** 7.25 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	470	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	390	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	2.3J	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	48	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	0.11J	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	0.51J	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	3.2	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	0.18J	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	71	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	1.8	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.18J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	3.7J	µg/L	1.9	5	M Pattanayek	9/24/2009

**Lab-Sample Number:** K00002891006  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 0.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 4  
**Station No.:** EMORY000.1RO  
**Date/Time Collected:** 09/22/2009 11:51  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.04 pH Units  
**Chlorine, residual:**  
**Conductivity:** 99 uMHO  
**Temperature:** 22.02  
**Dissolved Oxygen:** 7.25 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00002891007  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5  
**Station No.:** CLINC002.3RO  
**Date/Time Collected:** 09/22/2009 12:05  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.18 pH Units  
**Chlorine, residual:**  
**Conductivity:** 149 uMHO  
**Temperature:** 22.83  
**Dissolved Oxygen:** 6.41 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	220	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	220	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	0.37J	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	3.7J	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	57	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	0.28J	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	0.48J	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	4.0	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	0.79J	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	58	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	1.6	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	1.3J	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.37J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	4.7J	µg/L	1.9	5	M Pattanayek	9/24/2009

**Lab-Sample Number:** K00002891007  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5  
**Station No.:** CLINC002.3RO  
**Date/Time Collected:** 09/22/2009 12:05  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.18 pH Units  
**Chlorine, residual:**  
**Conductivity:** 149 uMHO  
**Temperature:** 22.83  
**Dissolved Oxygen:** 6.41 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00002891008  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River TVA Discharge Point  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5A  
**Station No.:** KingAshOutF2  
**Date/Time Collected:** 09/22/2009 12:17  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.21 pH Units  
**Chlorine, residual:**  
**Conductivity:** 129 uMHO  
**Temperature:** 23.94  
**Dissolved Oxygen:** 6.93 mg/L  
**Other:**  
**Flow:** CFS

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	410	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	450	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	0.90J	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	7.8	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	65	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	0.13J	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	2.3J	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	0.52J	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	7.2	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	0.27J	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	68	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	1.7	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.27J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	7.8	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	5.2	µg/L	1.9	5	M Pattanayek	9/24/2009



**Lab-Sample Number:** K00002891008  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River TVA Discharge Point  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5A  
**Station No.:** KingAshOutF2  
**Date/Time Collected:** 09/22/2009 12:17  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.21 pH Units  
**Chlorine, residual:**  
**Conductivity:** 129 uMHO  
**Temperature:** 23.94  
**Dissolved Oxygen:** 6.93 mg/L  
**Other:**  
**Flow:** CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

<b>Lab-Sample Number:</b>	K00002891009	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.18      pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley R	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	118      uMHO
<b>Project Site No.:</b>	6	<b>Temperature:</b>	21.99
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	7.06      mg/L
<b>Date/Time Collected:</b>	09/22/2009    12:37	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>			
<b>Date/Time Received:</b>	09/22/2009    14:20		
<b>Received By:</b>	E McCrary		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	250	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	170	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	36	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	0.21J	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	0.89J	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	0.47J	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	42	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	1.0	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.15J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	9/24/2009

<b>Lab-Sample Number:</b>	K00002891009	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.18      pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley R	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	118      uMHO
<b>Project Site No.:</b>	6	<b>Temperature:</b>	21.99
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	7.06      mg/L
<b>Date/Time Collected:</b>	09/22/2009    12:37	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>			
<b>Date/Time Received:</b>	09/22/2009    14:20		
<b>Received By:</b>	E McCrary		

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

<b>Lab-Sample Number:</b>	K00002891010	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.18 pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley R	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	118 uMHO
<b>Project Site No.:</b>	6FD	<b>Temperature:</b>	21.99
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	7.06 mg/L
<b>Date/Time Collected:</b>	09/22/2009 12:37	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>			
<b>Date/Time Received:</b>	09/22/2009 14:20		
<b>Received By:</b>	E McCrary		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	193	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	150	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	43	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	0.23J	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	2.0	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	0.50J	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	47	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	1.2	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.15J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	4.3J	µg/L	1.9	5	M Pattanayek	9/24/2009

<b>Lab-Sample Number:</b>	K00002891010	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.18      pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley R	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	118      uMHO
<b>Project Site No.:</b>	6FD	<b>Temperature:</b>	21.99
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	7.06      mg/L
<b>Date/Time Collected:</b>	09/22/2009    12:37	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>			
<b>Date/Time Received:</b>	09/22/2009    14:20		
<b>Received By:</b>	E McCrary		

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

<b>Lab-Sample Number:</b>	K00002891011	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley R	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	
<b>Project Site No.:</b>	6FB	<b>Temperature:</b>	
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	
<b>Date/Time Collected:</b>	09/22/2009 12:37	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>			
<b>Date/Time Received:</b>	09/22/2009 14:20		
<b>Received By:</b>	E McCrary		

TEST: Digestion Metals		METHOD: EPA 200.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Digestion Metals	09/23/2009				M Pattanayek	9/23/2009

TEST: ICP		METHOD: EPA 200.7				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Iron	U	µg/L	2.9	10	A Wilson	10/4/2009

TEST: ICP-MS		METHOD: EPA 200.8				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Aluminum	U	µg/L	6.4	10	M Pattanayek	9/24/2009
Antimony	U	µg/L	0.33	1	M Pattanayek	9/24/2009
Arsenic	U	µg/L	0.93	5	M Pattanayek	9/24/2009
Barium	U	µg/L	2.5	5	M Pattanayek	9/24/2009
Beryllium	U	µg/L	0.11	1	M Pattanayek	9/24/2009
Cadmium	U	µg/L	0.41	1	M Pattanayek	9/24/2009
Chromium	U	µg/L	2.0	5	M Pattanayek	9/24/2009
Cobalt	U	µg/L	0.04	1	M Pattanayek	9/24/2009
Copper	U	µg/L	0.38	1	M Pattanayek	9/24/2009
Lead	0.13J	µg/L	0.10	1	M Pattanayek	9/24/2009
Manganese	U	µg/L	0.42	1	M Pattanayek	9/24/2009
Nickel	U	µg/L	0.25	1	M Pattanayek	9/24/2009
Selenium	U	µg/L	1.3	5	M Pattanayek	9/24/2009
Silver	U	µg/L	0.03	0.25	M Pattanayek	9/24/2009
Thallium	0.13J	µg/L	0.03	1	M Pattanayek	9/24/2009
Vanadium	U	µg/L	3.4	5	M Pattanayek	9/24/2009
Zinc	U	µg/L	1.9	5	M Pattanayek	9/24/2009

Lab-Sample Number: K00002891011  
Project Name: TVA-Ash Spill  
Sample Description: Clinch River mile 4.5 near Sugar Grove Valley R  
Sampler Project Name: TVA Ash Spill  
Project Site No.: 6FB  
Station No.: CLINC004.5RO  
Date/Time Collected: 09/22/2009 12:37  
Sampler's Name: Geoff Klein  
County: ROANE - 73  
Sample Matrix: Water  
EFO: Knoxville  
Sampling Agency: TDEC-WPC  
Billing Code: 327.34-20  
Send Report To: TDEC-WPC  
Agency Invoiced: TDEC-WPC  
Priority Date:  
Date/Time Received: 09/22/2009 14:20  
Received By: E McCrary

**Field Determinations**

pH:  
Chlorine, residual:  
Conductivity:  
Temperature:  
Dissolved Oxygen:  
Other:  
Flow: CFS

TEST: Mercury		METHOD: EPA 245.1				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Mercury	U	µg/L	0.029	0.2	A Bass	10/5/2009

J - Estimated value between MDL and MQL  
MDL - Method Detection Limit  
MQL - Method Quantitation Limit  
U - Undetected



**STATE OF TENNESSEE  
DEPARTMENT OF HEALTH  
ENVIRONMENTAL LABORATORIES**

TDH: Lab Services JRL  
Lab Services - Jackson Regional Lab  
Jackson, TN 38301  
731-426-0686

TDH: Lab Services KRL  
Lab Services - Knoxville Regional Lab  
Knoxville, TN 37920  
865-549-5201

TDH: Lab Services NCL  
Lab Services - Nashville Central Lab  
Nashville, TN 37243  
615-262-6300

**Sent To:** Greg Denton  
TDEC-WPC  
6th Floor, L & C Tower Annex  
401 Church Street  
Nashville, TN 37243-1534

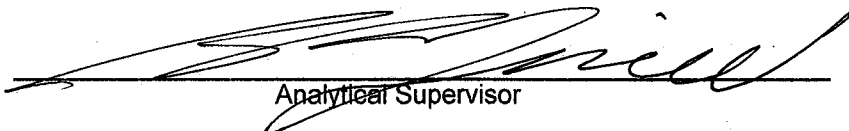
Michael Atchley  
TDEC-WPC  
Knoxville FO  
3711 Middlebrook Pike  
Knoxville, TN 37921

**Lab ID:** K00002891  
Knoxville Regional Laboratory

**Sampling Agency:** TDEC: Division of Water Pollution Control

**Billing Code:** 327.34-20

This is to certify that the following results were determined using  
good laboratory practices and in accordance with federal or state  
approved methodologies.

  
Analytical Supervisor



**Lab-Sample Number:** K00002891001  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River Mile 12.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 1  
**Station No.:** EMORY012.1RO  
**Date/Time Collected:** 09/22/2009 13:13  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.42 pH Units  
**Chlorine, residual:**  
**Conductivity:** 62 uMHO  
**Temperature:** 21.31  
**Dissolved Oxygen:** 9.06 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	17	mg/L	3.8	10	S Burchfield	9/28/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	17	mg/L	0.7	1	P Leathers	9/28/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	9/23/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	15	mg/L	10	10	A Peebles	9/25/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002891002  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 2.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2  
**Station No.:** EMORY002.1RO  
**Date/Time Collected:** 09/22/2009 11:00  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.05 pH Units  
**Chlorine, residual:**  
**Conductivity:** 69 uMHO  
**Temperature:** 20.77  
**Dissolved Oxygen:** 8.06 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2					
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE	
Total Alkalinity	20	mg/L	3.8	10	S Burchfield	9/28/2009	

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D					
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE	
Calcium hardness	19	mg/L	0.7	1	P Leathers	9/28/2009	

TEST: Residue, Settleable		METHOD: SM 2540F					
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE	
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	9/23/2009	

TEST: Residue, Suspended		METHOD: SM 2540D					
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE	
Total Suspended Solids	26	mg/L	10	10	A Peebles	9/25/2009	

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002891003  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Approx. 100' d/s from middle dredge point  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2A  
**Station No.:** Dredge Plume  
**Date/Time Collected:** 09/22/2009 11:15  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.05 pH Units  
**Chlorine, residual:**  
**Conductivity:** 88 uMHO  
**Temperature:** 21.14  
**Dissolved Oxygen:** 7.54 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	24	mg/L	3.8	10	S Burchfield	9/28/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	23	mg/L	0.7	1	P Leathers	9/28/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	0.1	ml/L	0.10	0.10	P Leathers	9/23/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	91	mg/L	10	10	A Peeples	9/25/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002891004  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.9 at underwater weir  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 2B  
**Station No.:** EMORY001.9RO  
**Date/Time Collected:** 09/22/2009 11:24  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 6.98 pH Units  
**Chlorine, residual:**  
**Conductivity:** 74 uMHO  
**Temperature:** 20.92  
**Dissolved Oxygen:** 7.84 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	21	mg/L	3.8	10	S Burchfield	9/28/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	20	mg/L	0.7	1	P Leathers	9/28/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	9/23/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	53	mg/L	10	10	A Peebles	9/25/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002891005  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 1.7  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 3  
**Station No.:** EMORY001.7RO  
**Date/Time Collected:** 09/22/2009 11:38  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 6.95 pH Units  
**Chlorine, residual:**  
**Conductivity:** 78 uMHO  
**Temperature:** 21.03  
**Dissolved Oxygen:** 7.69 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	23	mg/L	3.8	10	S Burchfield	9/28/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	21	mg/L	0.7	1	P Leathers	9/28/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	9/23/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	31	mg/L	10	10	A Peebles	9/25/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002891006  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Emory River mile 0.1  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 4  
**Station No.:** EMORY000.1RO  
**Date/Time Collected:** 09/22/2009 11:51  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.04 pH Units  
**Chlorine, residual:**  
**Conductivity:** 99 uMHO  
**Temperature:** 22.02  
**Dissolved Oxygen:** 7.25 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	29	mg/L	3.8	10	S Burchfield	9/28/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	27	mg/L	0.7	1	P Leathers	9/28/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	9/23/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	27	mg/L	10	10	A Peebles	9/25/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

**Lab-Sample Number:** K00002891007  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River mile 2.3  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5  
**Station No.:** CLINC002.3RO  
**Date/Time Collected:** 09/22/2009 12:05  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.18 pH Units  
**Chlorine, residual:**  
**Conductivity:** 149 uMHO  
**Temperature:** 22.83  
**Dissolved Oxygen:** 6.41 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	63	mg/L	3.8	10	S Burchfield	9/28/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	58	mg/L	0.7	1	P Leathers	9/28/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	9/23/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	10	mg/L	10	10	A Peebles	9/25/2009

J - Estimated value between MDL and MQL  
 MDL - Method Detection Limit  
 MQL - Method Quantitation Limit  
 U - Undetected

**Lab-Sample Number:** K00002891008  
**Project Name:** TVA-Ash Spill  
**Sample Description:** Clinch River TVA Discharge Point  
**Sampler Project Name:** TVA Ash Spill  
**Project Site No.:** 5A  
**Station No.:** KingAshOutF2  
**Date/Time Collected:** 09/22/2009 12:17  
**Sampler's Name:** Geoff Klein  
**County:** ROANE - 73  
**Sample Matrix:** Water  
**EFO:** Knoxville  
**Sampling Agency:** TDEC-WPC  
**Billing Code:** 327.34-20  
**Send Report To:** TDEC-WPC  
**Agency Invoiced:** TDEC-WPC  
**Priority Date:**  
**Date/Time Received:** 09/22/2009 14:20  
**Received By:** E McCrary

**Field Determinations**  
**pH:** 7.21 pH Units  
**Chlorine, residual:**  
**Conductivity:** 129 uMHO  
**Temperature:** 23.94  
**Dissolved Oxygen:** 6.93 mg/L  
**Other:**  
**Flow:** CFS

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	36	mg/L	3.8	10	S Burchfield	9/28/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	35	mg/L	0.7	1	P Leathers	9/28/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	9/23/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	31	mg/L	10	10	A Peebles	9/25/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**



<b>Lab-Sample Number:</b>	K00002891009	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.18      pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley R	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	118      uMHO
<b>Project Site No.:</b>	6	<b>Temperature:</b>	21.99
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	7.06      mg/L
<b>Date/Time Collected:</b>	09/22/2009    12:37	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>			
<b>Date/Time Received:</b>	09/22/2009    14:20		
<b>Received By:</b>	E McCrary		

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	69	mg/L	3.8	10	S Burchfield	9/28/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	57	mg/L	0.7	1	P Leathers	9/28/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	9/23/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	10	mg/L	10	10	A Peebles	9/25/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

<b>Lab-Sample Number:</b>	K00002891010	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	7.18      pH Units
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley F	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	118      uMHO
<b>Project Site No.:</b>	6FD	<b>Temperature:</b>	21.99
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	7.06      mg/L
<b>Date/Time Collected:</b>	09/22/2009    12:37	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>			
<b>Date/Time Received:</b>	09/22/2009    14:20		
<b>Received By:</b>	E McCrary		

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	71	mg/L	3.8	10	S Burchfield	9/28/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	61	mg/L	0.7	1	P Leathers	9/28/2009

TEST: Residue, Settleable		METHOD: SM 2540F				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Settleable Residue	U	ml/L	0.10	0.10	P Leathers	9/23/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	10	mg/L	10	10	A Peebles	9/25/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**

<b>Lab-Sample Number:</b>	K00002891011	<b>Field Determinations</b>	
<b>Project Name:</b>	TVA-Ash Spill	<b>pH:</b>	
<b>Sample Description:</b>	Clinch River mile 4.5 near Sugar Grove Valley F	<b>Chlorine, residual:</b>	
<b>Sampler Project Name:</b>	TVA Ash Spill	<b>Conductivity:</b>	
<b>Project Site No.:</b>	6FB	<b>Temperature:</b>	
<b>Station No.:</b>	CLINC004.5RO	<b>Dissolved Oxygen:</b>	
<b>Date/Time Collected:</b>	09/22/2009 12:37	<b>Other:</b>	
<b>Sampler's Name:</b>	Geoff Klein	<b>Flow:</b>	CFS
<b>County:</b>	ROANE - 73		
<b>Sample Matrix:</b>	Water		
<b>EFO:</b>	Knoxville		
<b>Sampling Agency:</b>	TDEC-WPC		
<b>Billing Code:</b>	327.34-20		
<b>Send Report To:</b>	TDEC-WPC		
<b>Agency Invoiced:</b>	TDEC-WPC		
<b>Priority Date:</b>			
<b>Date/Time Received:</b>	09/22/2009 14:20		
<b>Received By:</b>	E McCrary		

TEST: Alkalinity, Total		METHOD: EPA 310.2				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Alkalinity	U	mg/L	3.8	10	S Burchfield	9/28/2009

TEST: Hardness, Calcium		METHOD: SM 3500-Ca D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Calcium hardness	U	mg/L	0.7	1	P Leathers	9/28/2009

TEST: Residue, Suspended		METHOD: SM 2540D				
ANALYTE	RESULT	UNITS	MDL	MQL	ANALYZED BY:	DATE
Total Suspended Solids	U	mg/L	10	10	A Peebles	9/25/2009

**J - Estimated value between MDL and MQL**  
**MDL - Method Detection Limit**  
**MQL - Method Quantitation Limit**  
**U - Undetected**